



PRACTICE OF REGULAR PHYSICAL ACTIVITY PROGRAM IN MINIMIZING AGE RELATED RISK FACTORS

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ABSTRACT

Engagement in physical activity often declines with increasing age. Benefits of regular exercise have been studied extensively and are myriad, including reduction in risk of heart attack and stroke, improvement of diabetic control, stress reduction, improvement of pulmonary function, reduction of osteoarthritis pain and stiffness, and reduction of depressive symptoms. Beyond the benefits associated with chronic disease processes, physical activity in and of itself helps to maintain pulmonary and cardiac function, as well as musculoskeletal mass and tone. There is a clear connection between maintenance of muscle strength, cardiovascular tone, and the ability to perform activities of daily living, to engage in leisure activities, and maintain quality of life. Intensity of physical activity and appropriate nutrition contribute to the maintenance of muscle mass. With normal aging, a reduction in muscle mass does occur. Participating in a regular exercise program can help reduce the risk of developing sarcopenia and its consequences.

INTRODUCTION:

The most widely accepted definition of health is that of the World Health Organisation constitution. It stated that "health is state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." (WHO-1946)

The notion of physical fitness is used in two close meanings:

1. General Fitness
2. Task oriented Fitness

General Fitness: In its most general meaning physical fitness is a general state of good physical health or we can say physical fitness is usually a result of regular physical activity and proper nutrition.

Task Oriented Fitness: A person may be said to be physically fit to perform a particular task with a reasonable efficiency.

The Aging: Aging is the accumulation of changes responsible for the sequential alteration that accompany advancing age and the associated progressive increases in the chance of disease and death.

General Fitness Training: General fitness training works towards broad goals of overall health and wellbeing rather than narrow goals of sports competition, large muscles or concern over appearance. A regular moderate workout regimen and healthy diet can improve general appearance markers of good health such as muscle tone, healthy skin, hair and nails, while preventing age related heart and organs failure that accompany inactivity and poor diet.

Diet itself helps to increase calorie burning by boosting metabolism, process further enhance while gaining more lean muscle. An aerobic exercise can burn fat and increase the metabolic rate.

Muscle and bone condition in older age:

Muscle, bones, joints are affected by the aging process. Such as following:

- Osteoarthritis - The cartilage within the joint breaks down, causing pain and stiffness.
- Osteomalacia - The bones become soft due to problem with the metabolism of vitamin-D.
- Osteoporosis - The bones lose mass and become brittle, fractures are more likely.
- Rheumatoid Arthritis - Inflammation of the joint.
- Muscles weakness and pain – any of the above condition can affect the proper functioning of the associated muscles.

Cognitive function in older population:

Cognitive impairment and dementia occur commonly in the elderly population and increases in incidence within those older than 65 years. Several studies have analyzed the risk factors for development of dementia, specially Alzheimer's disease. Beyond health risk factors such as diabetes, hypertension and

hyperlipidemia.

Skin changes that come with Age

As we grow older, changes like these naturally occur.

- Skin becomes rougher.
- Skin becomes Black.
- Skin becomes more transparent.
- Skin becomes more fragile.
- Skin becomes more easily bruised.

As the people grow older, an active lifestyle is more important than ever. Regular exercise can help to boost energy, the independence and manage the symptoms of illness or pains. Exercise can even reverse some of the symptoms of ageing. Exercise is not only good for the body but for the good of mind, mood and memory. Research shows that benefits of exercise in whole body for older adults. In the older age regular exercises is more important than ever for the body and mind.

A) Physical health benefits of exercise and fitness for older adults:

- i) **Exercise helps older adult to maintain or to lose weight:-** as metabolism naturally slows with age, maintaining a healthy weight is a challenge. Exercise helps to burn more calories. When the body reaches a healthy weight, age people's overall wellness will improve.
- ii) **Exercise reduce the impact of illness and chronic disease:-** among the many benefits of exercise for adults over 50 included improved immune function, better heart health and blood pressure, better bone density and bone functioning. People who exercise also have a lower risk of several chronic conditions including Alzheimer's disease, diabetes, obesity, heart disease, osteoporosis and colon cancer.
- iii) **Exercise enhances mobility, flexibility and balance in older adults:-** exercise improves older people strength, flexibility and posture, which helps to keep balance, co-ordination and reducing the risk of falls. Strength training also helps alleviate the symptoms of chronic condition such as arthritis.

B) Mental health benefits of exercise and fitness for older adults.

i) Exercise improves the sleep.

Poor sleep is an inevitable consequence of aging and quality sleep is important for overall health. Exercise often improves sleep, helping fall asleep more quickly and sleep more deeply.

ii) Exercise boosts mood and self-confidence

Endorphin produced by exercise can actually help feel better and reduced feelings of sadness or depression. Being active and feeling strong naturally helps feel more self-confident.

iii) Exercise is good for brain

Exercise benefits regular brain functions and can help keep the brain active, which can prevent memory loss, cognitive decline, and dementia. Exercise may even help slow the progression of brain disorders such as Alzheimer's diseases.

Types of activities that is beneficial to older adults:

1. Walking. Walking is a perfect way to start exercising. It requires no special equipment, aside from a pair of comfortable walking shoes, and can be done

anywhere.

2. Senior sports or fitness classes. Keeps you mortified well also providing sources of fun, stress, and a place to meet friends.
3. Water aerobic and water sports. Working out in water is a lot easier for seniors because water reduces stress on the body's joints.
4. Yoga, a series of poses with breathing. Moving through the poses works on strength, flexibility and balance. Yoga can be adapted to any program.

Physical activity can help:

Exercise can prevent many age-related changes in muscles, bones and joints and reverse these changes as well. It's never too late to start living an active life style and enjoying the benefits.

Research shows that:

- Exercise can make bones stronger and help slow the rate of bone loss.
- Older people can increase muscle mass and strength through muscle strengthening activities.
- Balance and coordination exercise, can help reduce the risk of falls.
- Physical in later life may delay the progression of osteoporosis as it slows down the rate at which bone mineral density is reduced.
- Weight-bearing exercise, such as walking or weight training is the best type of exercise for maintenance of bone mass.
- Older people who exercise in water (which is not weight bearing) may still experience increases in bone and muscle mass compared to sedentary older people.
- Stretching is another excellent way to help maintain joint flexibility.

CONCLUSION:

Based on the research of the study, now the conclusion is following as per the research study ultimately, the goal in participation of physical activity in the healthy elderly population is maintenance and development of physical functional reserve capacity. For individuals suffering from acute illness, appropriate physical activity in the form of physical therapy, rehabilitation, and scheduled exercise can accelerate recovery to a functional baseline. Normal aging is associated with physiologic changes that alter eating habits. Risk factors for malnutrition can be easily identified using widely disseminated screening tools. Optimization of chronic illnesses associated with increased risk of developing dementia, and increased participation in leisure activities can be protective against the development of dementia (specifically Alzheimer's disease). A dose relation exists between amount of participation in leisure activities and reduction in risk of developing dementia. Encouraging elderly individuals to participate in such activities and addressing barriers that may impair their participation can be beneficial and minimize the aging risk factor.

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